

FIG.1

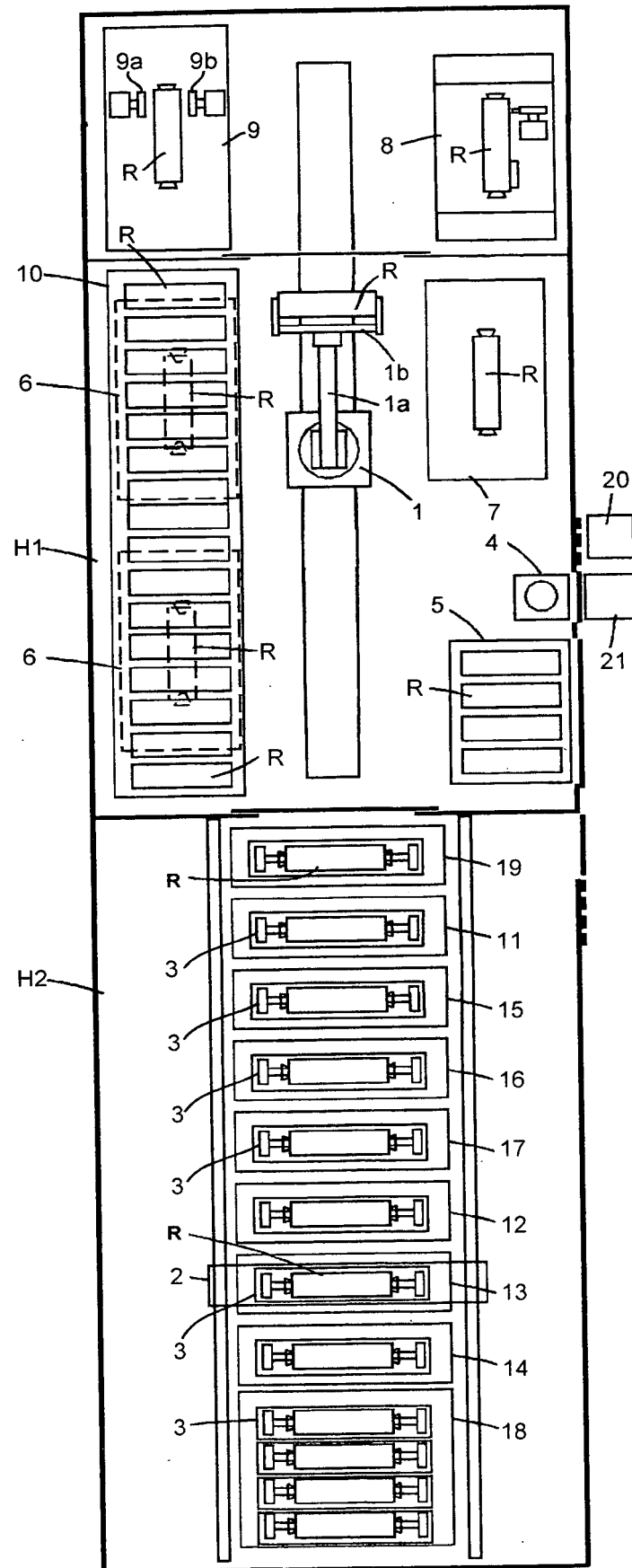


FIG.2

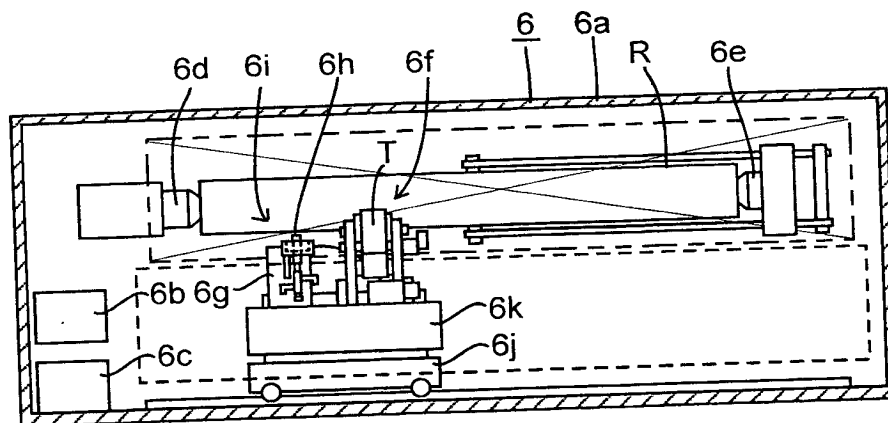
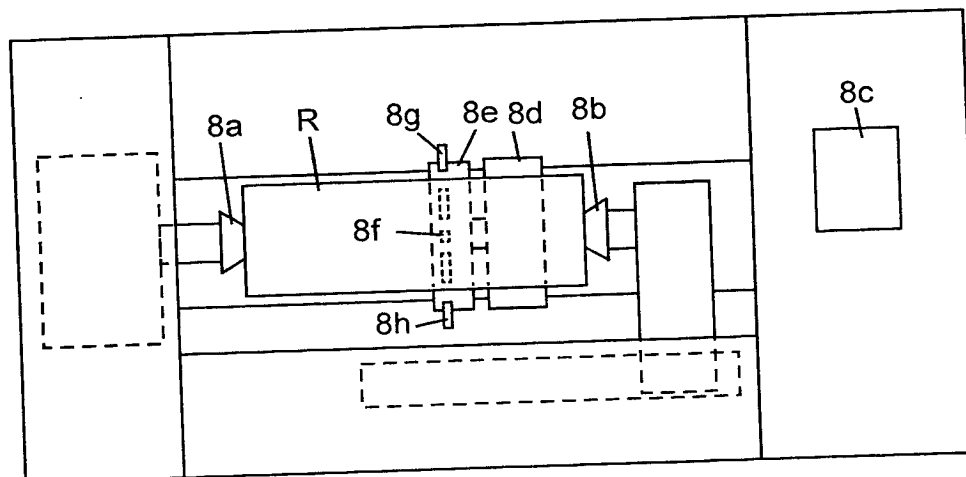


FIG.3



# FIG.4

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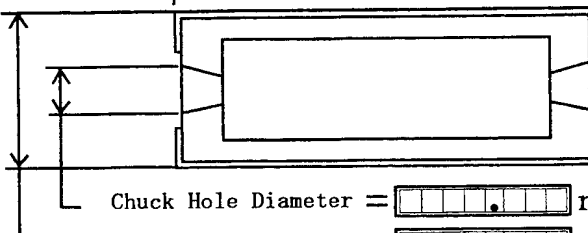
## Data Input Sheet

## Roll Identification No.

Roll Length = 

.

 mm



Chuck Hole Diameter = 

.

 mm

Roll Diameter = 

.

 mm

Chromium Plating Thickness = 

8

 $\mu$  m

Copper Sulfate Plating Thickness = 

130

 $\mu$  m

Nickel Plating Thickness = 

2

 $\mu$  m

Minimum Cutting Margin = 

48

 $\mu$  m

Allowable Eccentric Amount = 

30

 $\mu$  m

Minimum Allowable Copper Sulfate Plating Thickness After Cylinder Machining = 

20

 $\mu$  m

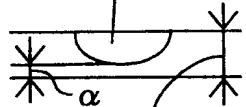
Copper Sulfate Plating Thickness Left on Machined End Surface = 

60

 $\mu$  m

Chuck Automatic
  Automatic transition of Measurement
  Automatic transition of Machining
  Measurement Run
  Set

Cell



Minimum Cutting Margin  
(Cell Depth +  $\alpha$ )

# FIG.5

